

## REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated November 18, 2003 (U.S. Patent Office Paper No. 5). In view of the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

### Status of the Claims

As outlined above, claims 1 to 17 are pending in this application. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

### Prior Art Rejections

Claims 1, 2, 4, 12, and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sasakura *et al.*, U.S. Patent No. 5,929,951 (further, Sasakura '951), Abileah *et al.*, U.S. Patent No. 5,629,784 (further, Abileah '784) and Koike *et al.*, U.S. Patent No. 6,290,364 (further, Koike '364) in view of Fukayama *et al.*, U.S. Patent Application 2001/0019377 A1 (further, Fukayama '377). Applicants respectfully traverse the above rejection.

Claim 1 recites a liquid crystal display device comprising a liquid crystal display element, a light source, a substantially rectangular diffusion plate which is interposed between the liquid crystal display element and the light source, and the least one optical sheet which is arranged between the diffusion plate and the liquid crystal display element, wherein the liquid crystal display device includes a transparent sheet which is arranged between the diffusion plate and the light source and has a contour which is substantially equal to a contour of the diffusion plate, and at least one optical sheet is brought into contact with the diffusion plate and respective major portions or respective whole portions of four sides of the transparent sheet are adhered to the diffusion plate.

The Examiner alleges in the office action, on page 2 last paragraph that Fig. 13 of Sasakura '951 anticipates the disclosure of claim 1 by showing a transparent sheet member

between a scattering member acting as a diffuser or diffusion sheet and a light source and that both transparent sheet member and scattering member have similar contours and dimensions. However, the Examiner concedes that Sasakura '951 does not disclose at least one feature of claim 1, namely the optical sheet contacting the diffusion plate.

Applicants respectfully disagree with the Examiner's allegations made in connection with Sasakura '951 and respectfully submit that Sasakura '951 in fact discloses, according to Figs. 11 and 13 and their descriptions, made in col. 9, line 32 to col. 12, lines 65, an illumination device formed by a thin cold cathode lamp (the light source) in contact on its upper surface with a scattering member, a polycarbonate resin disposed between the scattering member and a prism array member that is in contact through its upper surface with a polarizer. Sasakura '951 does not disclose, teach or suggest, as the Examiner alleges, a transparent sheet member between a scattering member acting as a diffuser and a light source.

In addition to the above, Applicants respectfully submit that Sasakura '951 fails to disclose the following elements of claim 1: a substantially rectangular diffusion plate which is interposed between the liquid crystal display element and the light source and at least one optical sheet which is arranged between the diffusion plate and the liquid crystal display element. After careful review of the reference and in agreement with the Examiner's admission, Applicants also submit that Sasakura '951 fails to disclose that the liquid crystal display device includes a transparent sheet which is arranged between the diffusion plate and the light source and has a contour which is substantially equal to a contour of the diffusion plate. Further yet, Applicants submit that Sasakura '951 fails to disclose at least one optical sheet that is brought into contact with the diffusion plate and respective major portions or respective whole portions of four sides of the transparent sheet that are adhered to the diffusion plate. The Examiner also agrees with this deficiency of Sasakura '951 on page 3, lines 2 to 8 of the office action. Based on the above Applicants respectfully submit that Sasakura '951 cannot anticipate the invention as recited in claim 1.

The Examiner alleges in the office action that Abileah '784 discloses in col. 14, lines 52 to 58, an optical film adhered or affixed to a diffuser via an adhesive and that it would have been obvious to modify Sasakura '951 in view of Abileah '784 to obtain the recitation of claim 1. Applicants respectfully disagree with both allegations made above and submit that Abileah '784 merely discloses in col. 14, lines 52 to 58, that an optical film is optically

adhered or affixed to a polarizer and diffuser with the help of an index matching oil or adhesive. If oil is used, then the optical film and the polarizer and diffuser are compression mounted.

After careful review of the reference Applicants submit that Abileah '784 fails to specifically disclose teach or suggest that "respective major portions or respective whole portions of four sides of the transparent sheet are adhered to the diffusion plate." Abileah '784, at most, discloses that a polarizer and diffuser are in contact with an optical film and does not specify if "respective major portions or respective whole portions of four sides of the transparent sheet" of the diffusion plate alone are in contact with the optical film.

In addition, Applicants respectfully submit that the combination of disclosures of Sasakura '951 and Abileah '784 does not result in the recitation of claim 1. The combination of Sasakura '951 and Abileah '784 suggested by the Examiner would at most result in a liquid crystal display device comprising an illumination device formed by a thin cold cathode lamp (the light source) in contact on its upper surface with a scattering member, a polycarbonate resin disposed between the scattering member and a prism array member that is in contact through its upper surface with a polarizer and an optical film that is affixed to a diffuser. The resulting device still differs from the liquid crystal display device of claim 1 due to the fact that the combination still fails to disclose, teach or suggest a substantially rectangular diffusion plate which is interposed between the least one optical sheet which is arranged between the diffusion plate and the liquid crystal display element, a transparent sheet which is arranged between the diffusion plate and the light source and has a contour which is substantially equal to a contour of the diffusion plate, at least one optical sheet that is brought into contact with the diffusion plate and respective major portions or respective whole portions of four sides of the transparent sheet are adhered to the diffusion plate. Based on the above, Applicants respectfully submit that Abileah '784 on its own or in combination with Sasakura '951 does not anticipate or render obvious the recitation of claim 1.

The Examiner alleges in the Office Action on page 3, second paragraph, that Koike '364 cures the deficiency of Sasakura '951 by disclosing a method of fixing the transparent plate and diffusion plate by adjoining ends of the transparent plate.

Applicants respectfully submit that lines 3 to 7, col. 23 of Koike '364 teaches that for a junction of a light diffusion plate and the transparent plate an adhesive material may preferably be inserted in a boundary face therebetween or a method of fixing by pressing the

both ends using any of the fasteners or fittings is preferable. At most, Koike '364 only teaches an adhesive material inserted in a boundary face therebetween the diffusion plate and the transparent plate, adhesive material that is not a feature recited by claim 1. Koike '364 also only teaches that the diffusion plate and the transparent plate are adhered through the boundary face therebetween. Applicants respectfully submit that the combination of Koike '364 with Sasakura '951 does not result in the recitation of claim 1. Koike '364 fails to cure any of the deficiencies of Sasakura '951 referenced above. Therefore, the combination of Sasakura '951 and Koike '364 would result in a teaching that differs from the recitation of claim 1.

Based on the above, Applicants contend that Koike '364 alone and the combination of Sasakura '951 and Koike '364 fail to disclose, teach or suggest each and every feature of claim 1. Therefore, they do not anticipate or render obvious the invention as recited in claim 1.

The Examiner alleged in the office action that paragraph [0026] of Fukayama '377 cures another deficiency of Sasakura '951 and discloses a rectangular diffusion plate between a LCD element and a light source and at least an optical sheet between a diffusion plate and an LCD element. Applicants respectfully disagree and submit that Fukayama '377 discloses in paragraph [0026] a liquid crystal display module provided with a direct backlight type light source, a reflection plate, a light source unit made of a plurality of fluorescent lamps fixed to this, a light diffusion plate, an optical sheet, and a liquid crystal display panel are stacked up in this order on the main surface. However, Fukayama '377 fails to disclose an optical sheet disposed between the direct backlight source and the light diffusion plate. Therefore, a combination of Sasakura '951 and Fukayama '377 fails to disclose all the features as recited in claim 1. Based on the above, Applicants contend that Fukayama '377 alone or in combination with Sasakura '951 and Fukayama '377 fails to anticipate or render obvious every feature of the invention according to claim 1.

In addition to the arguments presented above in connection with the rejection of claim 1 and given the number of references used by the Examiner to construe this rejection, Applicants would contend that the Examiner is impermissibly using hindsight in the context of the teachings of the present application to establish a *prima facie* case of obviousness. Rather than considering each reference as a whole, the Examiner is using knowledge gleaned from the disclosure of the present application to establish a *prima facie* case of obviousness.

Claims 2, 4, 12, and 13 depend from and add features to claim 1. Therefore, they are also allowable for at least the same reasons discussed above in connection with claim 1.

Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sasakura *et al.*, U.S. Patent No. 5,929,951 (further, Sasakura '951), Abileah *et al.*, U.S. Patent No. 5,629,784 (further, Abileah '784), Koike *et al.*, U.S. Patent No. 6,290,364 (further, Koike '364) and Fukayama *et al.*, U.S. Patent Application No. 2001/0019377 A1 (further, Fukayama '377) in further view of Odille *et al.*, U.S. Patent No. 6,504,661 (further, Odille '661). Applicants respectfully traverse the rejection.

Claim 3 depends from and adds features to allowable claim 1. Therefore, all the arguments made above to support the allowability of claim 1 apply in response to the above rejection of claim 3.

In addition to the references cited against claim 1 the Examiner uses Odille '661 to further reject claim 3. The Examiner alleges that it would have been obvious to modify Sasakura '951 in view of Odille '661 to obtain the recitation of claim 3. Applicants respectfully traverse the above rejection and submit that claim 3 adds to claim 1 the feature of "wherein the transparent sheet is adhered to the diffusion plate using a pressure sensitive adhesive double-sided tape or a tacky adhesive agent".

Applicants respectfully submit that Odille '661 discloses in col. 1, lines 52 to 55 that a scattering film is fixedly joined by one of its faces to a transparent plate, made of glass for example to which it is joined by means of a layer made of an adhesive substance. Further in the reference, in col. 2, lines 58 to 60 Odille '661 teaches that: "This creates mechanical strains in the film and has other drawbacks related to the presence of the adhesive substance". Therefore, Odille '661 teaches away from the use of the adhesive. Based on the above Applicants respectfully submit that Odille '661 can not properly be used to establish a *prima facie* case of obviousness.

Based on all the above, claim's 3 dependency upon claim 1 and the fact that Odille '661 teaches away from the recitation of claim 3, Applicants respectfully ask the Examiner to withdraw the rejection against claim 3.

Claims 5 and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sasakura *et al.*, U.S. Patent No. 5,929,951 (further, Sasakura '951), Abileah *et al.*, U.S. Patent No. 5,629,784 (further, Abileah '784), Koike *et al.*, U.S. Patent No. 6,290,364 (further,

Koike '364) and Fukayama *et al.*, U.S. Patent Application No. 2001/0019377 A1 (further, Fukayama '377) in further view of Ode *et al.*, U.S. Patent No. 6,518,946 (further, Ode '946). Applicants respectfully traverse the rejection.

Claims 5 and 6 depend from and add features to allowable claim 1. Therefore, all the arguments made above to support the argument of allowability of claim 1 apply in response to the above rejection.

In addition to the references used to support the rejection of claim 1, the Examiner uses Ode '946 to allege that Ode '946 cures several deficiencies of Sasakura '951 and that it would have been obvious to use the disclosure of Ode '946 in combination with Sasakura '951 to obtain the recitation of claims 5 and 6.

Applicants respectfully disagree and submit that Ode '946 discloses a frame spacer used for suppressing the deformation of a diffusion sheet, a prism sheet and a polarized-light reflection plate. After careful review of Ode '946 Applicants respectfully submit that no other elements of claim 1 and claims 5 and 6 are disclosed, or suggested by Ode '661. Therefore, a combination between the disclosure of Sasakura '951 and Ode '661 does no result in the recitation of claim 1 and its additional features recited by claim 5 and 6.

Based on all the above Applicants submit that claims 5 and 6 are allowable over each reference and over the combination of references used by the Examiner to construe the rejection against claims 5 and 6.

Claims 7, 8, 10, 11, 14, 15, and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sasakura *et al.*, U.S. Patent No. 5,929,951 (further, Sasakura '951), Abileah *et al.*, U.S. Patent No. 5,629,784 (further, Abileah '784), Koike *et al.*, U.S. Patent No. 6,290,364 (further, Koike '364) and Fukayama *et al.*, U.S. Patent Application No. 2001/0019377 A1 (further, Fukayama '377) in further view of Ode *et al.*, U.S. Patent No. 6,518,946 (further, Ode '946).

Claim 7 recites a liquid crystal display device comprising a liquid crystal display element, a light source, a substantially rectangular diffusion plate which is interposed between the liquid crystal display element and the light source, and at least one optical sheet which is arranged between the diffusion plate and the liquid crystal display element, wherein the liquid crystal display device includes a transparent sheet which is arranged between the diffusion plate and the light source and has a contour which is substantially equal to a contour

of the diffusion plate and a spacer which restricts a warp quantity of the diffusion plate in the direction toward the light source, and at least one optical sheet is brought into contact with the diffusion plate and at least respective portions of four sides of the transparent sheet are adhered to the diffusion plate.

Applicants respectfully submit that claim 7 recites all the features of claim 1 and in addition it recites “a spacer which restricts a warp quantity of the diffusion plate in the direction toward the light source”.

Applicants contend that all the arguments made above in response to the rejection of claim 1 also apply in response to the above rejection.

The Examiner uses to construe the rejection against claim 7 the same set of references as it uses against claim 1 with the exception of Ode ‘946. After careful review of Ode ‘946 Applicants submit that a spacer that restricts a warp quantity of the diffusion plate in the direction toward the light source is not disclosed by Ode ‘946. Ode ‘946 only discloses a frame spacer used for suppressing the deformation of a diffusion sheet. Therefore, Ode ‘946 fails to cure the deficiencies of Sasakura ‘951 and the combination of these references fails to disclose each and every element of claim 7. Therefore, Applicants contend that claim 7 is not anticipated by the combination of references.

Claims 8, 10, and 17 depend from and add features to allowable claim 7. Therefore, they are also allowable for at least the same reasons discussed above in connection to claim 7.

Claim 11 recites a liquid crystal display device comprising a liquid crystal display element, a light source, a substantially rectangular diffusion plate which is interposed between the liquid crystal display element and the light source, and at least one optical sheet which is arranged between the diffusion plate and the liquid crystal display element, wherein the liquid crystal display device includes a transparent sheet which is arranged between the diffusion plate and the light source and has a contour which is substantially equal to a contour of the diffusion plate and a spacer which restricts a warp quantity of the diffusion plate in the direction toward the light source, and at least one optical sheet is brought into contact with the diffusion plate and the whole surface of the transparent sheet is adhered to the diffusion plate.

Applicants respectfully submit that claims 1 and 7 disclose the same features as claim 11 with the exception of “a spacer which restricts a warp quantity of the diffusion plate in the

direction toward the light source” and “the whole surface of the transparent sheet is adhered to the diffusion plate”.

Therefore, all the arguments made above in response to the rejection of claims 1 and 7 also apply in response to the above rejection of claim 11.

Claims 14 and 15 depend from and add features to allowable claim 1. Therefore, they are also allowable at least for the same reasons discussed above in connection with claim 1 and 7.

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over Sasakura *et al.*, U.S. Patent No. 5,929,951 (further, Sasakura ‘951), Abileah *et al.*, U.S. Patent No. 5,629,784 (further, Abileah ‘784), Koike *et al.*, U.S. Patent No. 6,290,364 (further, Koike ‘364) and Fukayama *et al.*, U.S. Patent Application No. 2001/0019377 A1 (further, Fukayama ‘377) and Ode *et al.*, U.S. Patent No. 6,518,946 (further, Ode ‘946) in further view of Odille *et al.*, U.S. Patent No. 6,504,661 (further, Odille ‘661). Applicants respectfully traverse the rejection.

Claim 9 depends from and adds features to independent claim 7. Therefore, claim 9 is allowable at least for the same reasons discussed above in connection with claim 7.

The Examiner alleges in the office action on page 7 that Odille ‘661 cures several deficiencies of Sasakura ‘951 and that it would have been obvious to use the disclosure of Odille ‘661 in combination with Sasakura ‘951 to obtain the recitation of claim 9.

Applicants respectfully disagree and submit that Odille ‘661 does not disclose, teach and suggest the feature of claim 9 “the transparent sheet is adhered to the diffusion plate using a pressure sensitive adhesive double-sided tape or a tacky adhesive agent”. Therefore, claim 9 is not anticipated by the above combination of references.

Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Sasakura *et al.*, U.S. Patent No. 5,929,951 (further, Sasakura ‘951), Abileah *et al.*, U.S. Patent No. 5,629,784 (further, Abileah ‘784), Koike *et al.*, U.S. Patent No. 6,290,364 (further, Koike ‘364) and Fukayama *et al.*, U.S. Patent Application 2001/0019377 A1 (further, Fukayama ‘377) and Ode *et al.*, U.S. Patent No. 6,518,946 (further, Ode ‘946) in further view of Odille *et al.*, U.S. Patent No. 6,504,661 (further, Odille ‘661). Applicants respectfully traverse the rejection.



Claim 16 depends from and adds features to independent claim 7. Therefore, claim 16 is allowable at least for the same reasons discussed above in connection with claim 7.

The Examiner alleges in the office action on page 7 that Odille '661 cures several deficiencies of Sasakura '951 and that it would have been obvious to use the disclosure of Odille '661 in combination with Sasakura '951 to obtain the recitation of claim 16.

Applicants respectfully disagree and submit that Odille '661 does not disclose the feature of claim 16 "the transparent sheet is adhered to the diffusion plate using a pressure sensitive adhesive double-sided tape or a tacky adhesive agent" and the features of its intervening claims "the whole or major portions of four sides of the transparent sheet are adhered to diffusion plate". Therefore, Applicants respectfully submit that the combination of references does not anticipate the recitation of claim 16.

#### Conclusion

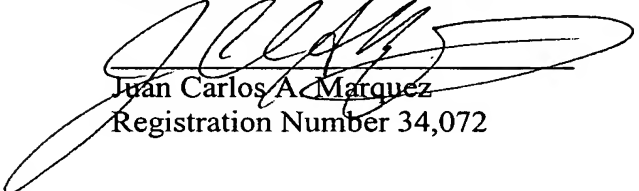
In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to

contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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